IN TWO SECTIONS SECTION TWO

THE AMERICAN WELDING SOCIETY JOURNAL

VOLUME 14 JANUARY 1935 NUMBER 1

INDEX TO VOLUME 13

1934

PUBLISHED BY THE
AMERICAN WELDING SOCIETY, 33 WEST 39TH STREET
NEW YORK, N. Y.

INDEX TO SUBJECTS

A.C. Arc Welding Advantages—C. J. Holslag, March, p. 12.
A.C. Arc Welding of Class I Pressure Vessels—O. A. Tilton, Dec., pp. 2–7.
Alloy Steel Welding—R. K. Hopkins, Oct., pp. 16–28.
Alternating Current Arc Welding Transformers—A. M. Candy, Sept., pp. 23–26; C. J. Holslag, Sept., pp. 28–29. Discussion by H. A. Winne, Oct., p. 9. Discussion by C. J. Holslag, Dec., p. 22.
Aluminum Welding and Its Alloys by Resistance Process—D. I. Bohn, April, pp. 4–7.
Aluminum Welding with the Gas Torch and the Metallic Arc—G. O. Hoglund, March, pp. 28–30.

Bending Tests of Welds—H. N. Boetcher, Feb., pp. 31–32.
Bend Tests of Welds—F. S. Mapes and F. Howenstein, Oct., pp. 28–30.
Boulder Dam Cylinder Gate and Nose Liner Welding Problems—C. H. Jennings, May, pp. 17–23.
Brazing with Silver Solders—R. H. Leach, Dec., pp. 23–27.
Breweries, Welding as an Aid to Modernization of—D. S. Lloyd, Jan., pp. 24–29.
Bridge Welding—G. A. Nikolaieff, July, pp. 19–23.
Bridge Welding—Nov., p. 22.
Bronze Welding, Nature of the Bond in—A. A. Jackman, July, pp. 5–11.
By-Laws of the Society—August, pp. 13–19.

Carbon Arc—Automatic Welding in the Automotive Field—A. F. Davis, March, pp. 16–20.
Cast Steel, Physical Properties of—A. E. Gibson, Feb., p. 29. Discussion by R. A. Bull, Feb., pp. 29–30.
Corrosion Resisting Steels, Welding of—Owen C. Jones, April, pp. 9–13.
Arc Welding of—A. F. Davis, April, p. 13; C. H. Jennings, April, pp. 13–14.
Cromansil Steel Welding—C. E. Westin, May, pp. 24–25.
Cutting—Machine Cutting and Flame Machining by the Oxy-Acetylene Process—Richard F. Helmkamp, Feb., pp. 4–9.
Cutting of Structural Steel by Oxyacetylene—H. H. Moss, June, pp. 8–12.

Duralumin Resistance Welding—N. F. Ward, Dec., pp. 8–13.

Elevated Temperatures, Welds Subjected to—J. C. Hodge, Jan., pp. 12–17.
Engine Bed on C. B. & Q. "Zephyr" Welded—Robert W. Wolcott, May, pp. 31–32.

Fatigue of Metals—G. E. Thornton, March, pp. 20–25.
Fatigue Strength of Welds—Chas. H. Jennings, June, p. 7.
Fatigue Testing of Welds—J. H. Zimmerman, Sept., pp. 13–15.
Frameless Steel—Mills G. Clark, July, p. 2.

Hard Facing—E. H. LeVan, Nov., pp. 10–13.
Heat Treatment of Welds—L. W. Schuster, April, pp. 19–20.
Historical Developments and Future Possibilities of Welding—D. S. Jacobus, Oct., pp. 10–13.

Impact Resistance at Sub-Zero Temperatures—R. K. Hopkins, Oct., pp. 16–28.
Impact Tests of Welds—A. E. White, D. H. Corey and C. L. Clark, Sept., pp. 3–11.
Impact Values of Weld Metal—J. C. Hodge, Jan., pp. 12–17. Discussion by G. E. Doan, Feb., p. 9.

Machinery Welding at Boulder Dam—Chas. H. Jennings, May, pp. 17–23.
Machinery Welding—Steel Engine Bed—R. W. Wolcott, May, pp. 31–32.
Machinery Welding—Steel Press—Chas. H. Jennings, Nov., pp. 7–8.
Maintenance Welding—H. S. Orwig, Nov., p. 6.
Manganese Steel Welding—E. L. Quinn, April, pp. 27–29.
Membership Directory—August, pp. 19–37.
Metal Spraying—E. V. David, Sept., pp. 16–20.

Nickel Steel Welding—W. L. Warner, June, pp. 15–23.

Peening or Caulking—C. J. Holslag, April, pp. 30–31.
Photoelastic Methods of Analysis of Stresses in Transverse Fillet Welds—A. G. Solakian, Feb., pp. 22–29.
Photoelastic Studies of Stress Distribution in Welded Joints—Everett Chapman, Feb., pp. 10–14.
Photoelastic Studies of Shear Distribution at Junction of Beam Weld to Column—S. C. Hollister and R. H. Wood, March, pp. 13–16.
Photoelastic Studies of Stresses in Fusion Joints—Prof. E. G. Coker, June, pp. 26–31.
Pictorial Review of Welding Progress in 1933—Jan., pp. 4–11.
Pictorial Review of Welding Applications—A. F. Davis, Oct., pp. 2–9.
Pipe in Skating Rink Welded—W. T. Cook, June, p. 23.
Pipe Lines—Cost of Welding—Albert Uhlig, April, pp. 7–8.
Pipe Line—Largest Welded—D. Zinck, July, p. 29.
Pipe Welded for Boulder Dam—W. A. Cather, March, pp. 4–6.
Pipe Welding in Power Plant—R. H. Rogers, May, pp. 13–16.
Piping for High Pressure and Temperature Steam Station—A. E. White, D. H. Corey and C. L. Clark, Sept., pp. 3–11.
Power Plant Welded for the General Electric Company—H. Malcolm Priest, June, pp. 2–7.
Power Plant Welded Throughout—R. H. Rogers, May, pp. 13–16.
Pressure Vessels—Automatic A.C. Welding—O. A. Tilton, Dec., pp. 2–7.
Pressure Vessels—Historical Developments and Future Possibilities—D. S. Jacobus, Oct., pp. 10–13.
Pressure Vessel Tests—A. F. Davis, June, pp. 31–32.
Production Welding with the Electric Arc—A. F. Davis, May, pp. 7–11.

Qualifying Operators of Welding Equipment—W. D. Halsey, Sept., pp. 11–12; H. W. Pierce, Sept., pp. 26–28; E. D. Debes, Oct., p. 13; A. Kidd, Nov., pp. 8–9; S. Lewis Land and J. H. Zink, Dec., pp. 14–16.

Rail Ends, Reconditioning of—J. C. Hartley, March, pp. 26–28.
Rail Ends Restored by Welding—B. C. Tracey and O. A. Tilton, June, pp. 13–14.
Rail Joints in Main Track Welded—H. S. Clarke, Sept., pp. 21–22.
Railroad Welding—Light Weight Cars—M. B. Butler, Jr., Nov., pp. 2–6.
Resistance Seam Welding Automobile Gas Tanks—R. Applegate, Nov., pp. 16–18.
Resistance Welding of Aluminum and Its Alloys—D. I. Bohn, April, pp. 4–7.
Resistance Welding Control Devices—Rufus L. Briggs, March, pp. 8–11.
Resistance Welding—Discussion of Papers on Timing Devices—C. Stansbury, Feb., p. 33.
Resistance Welding Duralumin—N. F. Ward, Dec., pp. 8–13.
Resistance Welding Electrode Alloys—J. J. Kelly, July, p. 11.
Resistance Welding—Projection Welding and Power Consumption—P. W. Fassler, Nov., pp. 14–16.
Resistance Welding—Shot Welding Applications to Light Members—M. B. Butler, Jr., Nov., pp. 2–6.
Resistance Welding—Size and Spacing of Spot Welds—Rufus L. Briggs, Nov., pp. 25–30.
Resistance Welding—Thyratron Control for High Speed Welders—W. C. Hutchins and O. W. Livingston, Nov., pp. 19–21.
Resistance Welding Wheels of Toy Trucks—Chas. E. Shearer, Nov., pp. 21–22.

Shear Distribution at Junction of Beam Weld to Column—S. C. Hollister and R. H. Wood, March, pp. 13–16.
Ship Building—Data on YF-221—P. B. Dungan, Jan., pp. 17–20.
Ship Welding—Discussion of Paper—David Arnott, March, pp. 6–8.
Ship Welding—Steel Barges—R. B. Reid, March, p. 25.
Ship Welding—Tow Boat—R. B. Reid, June, p. 23.
Spot Welding—Size and Spacing—R. L. Briggs, Nov., pp. 25–30.
Stainless Clad Pipe Arc Welded—A. F. Davis, Sept., p. 2.
Stainless Clad Steel for Glycerin Tanks—W. B. Keelor, June, p. 12.
Stainless Clad Steel Welding—W. B. Keelor, Dec., pp. 28–31.
Stress Distribution in Welded Joints—Everett Chapman, Feb., pp. 10–14.
Stress Measurements by Deformation—Josef Mathar, July, pp. 24–29.
Stresses in Fillet Welds—Cyril D. Jensen, Feb., pp. 17–21.
Stresses in Fusion Joints—Prof. E. G. Coker, June, pp. 26–31.
Stresses in Transverse Fillet Welds by Photoelastic Methods—A. G. Solakian, Feb., pp. 22–29.
Stress, Residual, in Arc-Welded Steel Plates—R. E. Jamieson, Dec., pp. 17–22.
Structural—Bridge Welded—G. A. Nikolaieff, July, pp. 19–23.
Structural—Bridge Welding, Nov., p. 22.
Structural Members, Tensile Tests of Welded and Riveted—R. P. Davis and G. P. Boomsliter, April, pp. 21–27.
Structural Steel Beams Repaired by Arc Welding—O. M. Harrelson and S. B. Slack, July, pp. 30–31.
Structural—Test of a Flat Steel Plate Floor under Loads—L. B. Tuckerman, A. H. Stang and W. R. Osgood, June, p. 24.
Structural Welding—Adaptable Types of Welded Connections for Buildings—G. D. Fish, Jan., pp. 20–23.
Structural Welding—Polish Regulations, July, pp. 12–15.
Australian Rules, July, pp. 15–18.
Structural Welding—Power Plant—H. Malcolm Priest, June, pp. 2–7.
Structural Welding—Prudential House in Warsaw—Stefan Bryla, May, pp. 26–30.
Structure Tested by Fire—A. F. Davis, July, p. 23.

Tests of Oxyacetylene Welding—Victor A. Amodeo, May, pp. 25–26.

B. Engin. Lib

Thermit Welding of Shaft—M. L. Smith, May, p. 12.
Track Maintenance with Oxyacetylene—Blair Blowers, Oct., pp. 14–15.
Training Welders—H. T. Bent, June, p. 25.
Transportation, Arc Welding in—A. F. Davis, July, pp. 3–4.
Under Water Welding—J. R. Withrow, March, pp. 30–32.
Under Water Welding—Discussion—C. D. Jensen, June, p. 31.
Under Water Welding—Prof. K. Hrenoff and Eng. M. Livshitz April, pp. 15–18.
Welding in Engineering Education—J. H. Zimmerman, Nov., pp. 23–24.
X-Ray Inspection of Welds, Some Limitations in—A. S. Douglass, Feb., pp. 15–16.
Discussion by G. E. Doan, Bela Ronay, J. E. Waugh, Feb., p. 16.

INDEX TO AUTHORS

AMERICAN BUREAU OF WELDING—Stresses in Transverse Fillet Welds by Photoelastic Methods—A. G. Solakian, Feb., pp. 22–29.
Shear Distribution at Junction of Beam Weld to Column—S. C. Hollister and R. H. Wood, March, pp. 13–16.
Fatigue of Metals—G. E. Thornton, March, pp. 20–25.
Tensile Tests of Welded and Riveted Structural Members—R. P. Davis and G. P. Boomsliter, April, pp. 21–27.
Welding of Structural Nickel Steel—W. L. Warner, June, pp. 15–23.
The Nature of the Bond in Bronze Welding—A. A. Jackman, July, pp. 5–11.
Annual Report—August, pp. 6–7.
Officers—August, p. 12.
An Examination of Welds Made under Field Conditions for High-Pressure, High-Temperature Steam Station Piping—A. F. White, D. H. Corey and C. L. Clark, Sept., pp. 3–17.
Notes on the Fatigue Testing of Welds—J. H. Zimmerman, Sept., pp. 13–15.
Historical Developments and Future Possibilities of Welding—D. S. Jacobus, Oct., pp. 10–13.
Resistance Welding of Thin-Gage Duralumin—N. F. Ward, Dec., pp. 8–13.
Some Measurements of Residual Stresses in Arc-Welded Steel Plates—R. E. Jamieson, Dec., pp. 17–22.
AMERICAN WELDING SOCIETY—A Pictorial Review of Welding Progress in 1933—Jan., pp. 4–11.
Year Book, Membership Directory, By-Laws, Financial Statement, Committee Reports—August.
Historical Development and Future Possibilities of Welding—D. S. Jacobus, Oct., pp. 10–13.
AMODEO, VICTOR A.—Recent Tests of Oxyacetylene Welding, May, pp. 25–26.
APPLEGATE, RAY—Resistance Seam Welding Automobile Gas Tanks, Nov., pp. 16–18.
ARNOTT, DAVID—Discussion of Paper on "Welding in a Large Shipyard," March, p. 6.
BARTLETT, GUY—For Boulder Dam, May, p. 23.
BENT, H. T.—Training Welders, June, p. 25.
BLOWERS, BLAIR—Acetylene Welding as Pertains to Track Maintenance, Oct., pp. 14–15.
BOETCHER, H. N.—Bending Tests of Welds, Feb., pp. 31–32.
BOHN, D. I.—Resistance Welding of Aluminum and Its Alloys, April, pp. 4–7.
BOOMSLITER, G. P.—Tensile Tests of Welded and Riveted Structural Members, April, pp. 21–27.
BRIGGS, RUFUS L.—The Development of Resistance Welding Electrical Power Control Devices, March, pp. 8–11.
Size and Spacing of Spot Welds, Nov., pp. 25–30.
BRYLA, STEFAN—Prudential House in Warsaw (Poland), May, pp. 26–29.
BULL, R. A.—Discussion of Paper on "Physical Properties of Welded Cast Steel," Feb., pp. 29–30.
BUTLER, M. B., JR.—A Light-Weight Car for City Traction Service, Nov., pp. 2–6.
CANDY, A. M.—Alternating Current Arc-Welding Transformer and Circuit Characteristics, Sept., pp. 23–26.
CATHER, W. A.—Fabricating Welded Pipe for Boulder Dam, March, pp. 4–5.
CHAPMAN, EVERETT—Welded Joints, Feb., pp. 10–14.
CLARK, C. L.—An Examination of Welds Made under Field Conditions for High-Pressure, High-Temperature Steam Station Piping, Sept., pp. 3–11.
CLARKE, H. S.—Welded Rail Joints—Main Track—Steam Railroads, Sept., pp. 21–22.
CLARK, MILLS G.—Frameless Steel, July, p. 2.
COKER, E. G.—The Stresses in Fusion Joints, June, pp. 26–31.
COOK, W. T.—Arc Welding Lays 11 Miles of Pipe in a Skating Rink, June, p. 23.
COREY, D. H.—An Examination of Welds Made under Field Conditions for High-Pressure, High-Temperature Steam Station Piping, Sept., pp. 3–11.
DAVID, E. V.—Sprayed Molten Metal Coatings, Sept., pp. 16–20.
DAVIS, A. F.—Automatic Carbon Arc Welding in the Automotive Field, March, pp. 16–20.
Arc Welding of Corrosion-Resisting Steels, April, p. 13.
Widening the Circle of Industrial Recovery with the Electric Arc, May, pp. 7–11.
Mistake in Testing Proves Quality of Weld Metal, June, pp. 31–32.
Arc Welding in Transportation, July, pp. 3–4.
Oil Explosion Fire Provides Unusual Test of Arc-Welded Structure, July, p. 23.
First Large Stainless Clad Pipe Is Arc Welded, Sept., p. 2.
Some Welding Applications, Oct., pp. 2–9.
DAVIS, R. P.—Tensile Tests of Welded and Riveted Structural Members, April, pp. 21–27.
DEBES, E. D.—Qualifying Operators of Welding Equipment, Oct., p. 13.
DOAN, GILBERT E.—Discussion of Paper on "Impact Values of Weld Metal," Feb., p. 9.
Discussion of Paper on "Limitations of X-Ray Inspection," Feb., p. 16.
Discussion of Paper on "Electric Arc Welding under Water," March, p. 32.
DOUGLASS, A. S.—Some Limitations of X-Ray Inspection of Welds, Feb., pp. 15–16.
DUNGAN, P. B.—Data on YF-221, Jan., pp. 17–20.
FASSLER, P. W.—Projection Welding and Power Consumption, Nov., pp. 14–16.
FISH, GILBERT, D.—Adaptable Types of Welded Connections for Buildings, Jan., pp. 20–23.
GIBSON, A. E.—Discussion of Paper on "Physical Properties of Welded Cast Steel," Feb., p. 29.
HALSEY, WM. D.—Qualifying Operators of Welding Equipment under A.S.M.E. Boiler and Pressure Vessel Codes, Sept., pp. 11–12.
HARRELSON, O. M.—Repair of Steel Beams by Arc Welding, July, pp. 30–31.
HARTLEY, J. C.—Reconditioning Rail Ends, March, pp. 26–28.
HELMKAMP, RICHARD F.—Machine Cutting and Flame Machining by the Oxyacetylene Process, Feb., pp. 4–9.
HODGE, JAMES CAMPBELL—Impact Values of Weld Metal, Jan., pp. 12–17.
HOGLUND, G. O.—Welding Aluminum with the Gas Torch and the Metallic Arc, March, pp. 28–30.
HOLLISTER, S. C.—Shear Distribution at Junction of Beam Weld to Column, March, pp. 13–16.
HOLSLAG, C. J.—The Disadvantages and History of A.C. Arc Welding, March, p. 12.
Peening or Caulking, April, pp. 30–32.
Acceptance of A. C. Welding, Sept., pp. 28–29.
Discussion of Alternating-Current Arc-Welding Papers, Dec., pp. 22 and 34.
HOPKINS, R. K.—Impact Resistance of Some Steels and Welds at Sub-Zero Temperatures, Oct., pp. 16–28.
HOWENSTEIN, F.—Free-Bend Tests on Welds, Oct., pp. 28–30.
HRENOFF, K.—Electric Arc Welding under Water, April, pp. 15–18.
HUTCHINS, WARREN C.—Thyratron Tube Control of High Speed Resistance Welders, Nov., pp. 19–21.
JACKMAN, A. A.—The Nature of the Bond in Bronze Welding, July, pp. 5–11.
JACOBUS, D. S.—Historical Developments and Future Possibilities of Welding, Oct., pp. 10–13.
JAMIESON, R. E.—Some Measurements of Residual Stress in Arc-Welded Steel Plates, Dec., pp. 17–22.
JENNINGS, CHAS. H.—The Welding of Corrosion-Resisting Steels, April, pp. 13–15.
Boulder Dam Cylinder Gate and Nose Liner Welding Problems, May, pp. 17–23.
The Effect of Welding Current on the Fatigue Strength of Welds, June, p. 7.
A Welded Steel Press, Nov., pp. 7–8.
JENSEN, CYRIL D.—Combined Stresses in Fillet Welds, Feb., pp. 17–21.
Discussion of Paper on "Electric Arc Welding under Water," June, p. 31.
JONES, OWEN C.—Welding Corrosion-Resisting Steels, April, pp. 9–13.
KEELOR, WILLIAM B.—Soap Manufacturer Chooses Stainless-Clad Steel for Glycerin Bleach Tanks, June, p. 12.
Fabricating Stainless Clad Steel, Dec., pp. 28–31.
KELLY, J. J.—New Resistance Welding Electrode Alloys, July, p. 11.

KIDD, ALEXANDER—Qualifying Operators of Welding Equipment under A.S.M.E. Boiler and Pressure Vessel Codes, Nov., pp. 8–9.
LAND, S. LEWIS—Qualifying Pipe Welders, Dec., pp. 14–16.
LEACH, ROBERT H —Brazing with Silver Solders, Dec., pp. 23–27.
LE VAN, E. H.—Hard-Facing, Nov., pp. 10–13.
LEVI, R.—The Stresses in Fusion Joints, June, pp. 26–31.
LIVINGSTON, O. W.—Thyratron Tube Control of High Speed Resistance Welders, Nov., pp. 19–21.
LIVSHITZ, M.—Electric Arc Welding under Water, April, pp. 15–18.
LLOYD, D. S.—Welding as an Aid to Modernization of Breweries, Jan., pp. 24–29.
MAPES, F. S.—Free-Bend Tests on Welds, Oct., pp. 28–30.
MATHAR, JOSEF—Determination of Initial Stresses by Measuring the Deformation around Drilled Holes, July, pp. 24–29.
MOODY, C. S.—Discussion of Paper "Welding in a Large Shipyard," March, p. 8.
MOSS, H. H.—Oxyacetylene Cutting of Structural Steel, June, pp. 8–12.
NIKOLAIEFF, G. A.—Investigation of Welded Bridges, July, pp. 19–23.
ORWIG, H. S.—Novel Weld Saves $475, Nov., p. 6.
OSGOOD, W. R.—Test of a Flat Steel-Plate Floor under Loads, June, p. 24.
PIERCE, HARRY W.—Discussion of Paper on "Welding in a Large Shipyard," March, pp. 7–8.
Qualification of Welding Equipment Operators, Sept., pp. 26–28.
PRIEST, H. MALCOLM—Applications of Structural Welding in the General Electric Company's Outdoor Mercury-Steam-Electric Power Plant, June, pp. 2–6.
QUINN, E. L.—Successful Manganese Steel Welding, April, pp. 27–29.
REID, R. B.—All-Welded Steel Barges, March, p. 25.
An All-Welded Diesel Towboat, June, p. 23.
ROGERS, R. H.—G-E Mercury-Vapor-Steam Plant Fusion-Welded Throughout, May, pp. 13–16.
RONAY, BELA—Discussion of Paper on "Limitations of X-Ray Inspection," Feb., p. 16.
RUSSELL, R.—The Stresses in Fusion Joints, June, pp. 26–31.
SCHUSTER, L. W.—The Effect of Heat Treatment of Welds, April, pp. 19–20.
SHEARER, CHAS. E.—Special Wheel Welder for Toy Trucks, Nov., pp. 21–22.
SLACK, SEARCY B.—Repair of Steel Beams by Arc Welding, July, pp. 30–31.
SMITH, MERRITT L.—Speedy Week-End Repair Restores Trolley Service for Monday A.M. Rush, May, p. 12.
SOLAKIAN, ARSHAG G.—Stresses in Transverse Fillet Welds by Photoelastic Methods, Feb., pp. 22–29.
STANG, A. H.—Test of a Flat Steel-Plate Floor under Loads, June, p. 24.
STANSBURY, C.—Discussion of Papers on Timing Devices for Resistance Welding, Feb., p. 33.
THORNTON, G. E.—Fatigue of Metals, March, pp. 20–25.
TILTON, O. A.—Restoring Battered Rail Ends by Welding, June, pp. 13–14.
Automatic A.C. Arc Welding of Class I Pressure Vessels, Dec., pp. 2–7.
TRACEY, B. C.—Restoring Battered Rail Ends by Welding, June, pp. 13–14.
TUCKERMAN, L. B.—Test of a Flat Steel-Plate Floor under Loads, June, p. 24.
UHLIG, ALBERT—Costs of Welding versus Cost of Fittings in Pipe Lines, April, pp. 7–8.
WARD, N. F.—Resistance Welding of Thin-Gage Duralumin, Dec., pp. 8–13.
WARNER, W. L.—Welding of Structural Nickel Steel, June, pp. 15–23.
WAUGH, J. E.—Discussion of Paper on "Limitations of X-Ray Inspection," Feb., p. 16.
WESTIN, C. E.—Strong Welds for Strong Steel, May, pp. 24–25.
WHITE, A. E.—An Examination of Welds Made under Field Conditions for High-Pressure, High-Temperature Steam Station Piping, Sept., pp. 3–11.
WINNE, H. A.—Discussion of "Alternating Current Arc-Welding Transformer and Circuit Characteristics," by A. M. Candy, Oct., p. 9.
WITHROW, JAMES R.—Discussion of Paper on "Electric Arc Welding under Water," March, pp. 30–32.
WOLCOTT, ROBERT W.—Welded Steel Engine Bed on C. B. & Q. High-Speed Streamlined "Zephyr," May, pp. 31–32.
WOOD, R. H.—Shear Distribution at Junction of Beam Weld to Column, March, pp. 13–16.
ZIMMERMAN, J. H.—Note on the Fatigue Testing of Welds, Sept., pp. 13–15.
The Place of Welding in Engineering Education, Nov., pp. 23–24.
ZINCK, D.—West Gets Largest Welded Pipe-Line, July, p. 29.
ZINK, JOHN H.—Qualifying Pipe Welders, Dec., pp. 14–16.